

APPLICATION FOR PERMIT

TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office..... APR 5 1979
 Returned to applicant for correction..... AUG 23 1979
 Corrected application filed..... SEP 14 1979
 Map filed..... SEP 4 1979 under 37712

The applicant..... Republic Geothermal, Inc.
 11823 E. Slauson Ave., Suite One, of Santa Fe Springs
 Street and No. or P.O. Box No. City or Town
 California 90670
 State and Zip Code No.
 hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) Incorporated in the State of Nevada on August 15, 1973 and reincorporated in the State of California by merger with wholly owned subsidiary on September 20, 1977.

1. The source of the proposed appropriation is..... Well No. 68-14 (Underground)
Name of stream, lake or other source.
2. The amount of water applied for is..... 7.7second-feet
One second-foot equals 448.83 gals. per min.
 (a) If stored in reservoir give number of acre-feet..... acre-feet
3. The water to be used for..... industrial
Irrigation, power, mining, manufacturing, domestic, or other use.
4. If use is for:
 - (a) Irrigation (state number of acres to be irrigated).....
 - (b) Stockwater (state number and kinds of animals to be watered).....
 - (c) Other use (describe fully under "No. 12. Remarks").....
 - (d) Power:
 - (1) Horsepower developed.....
 - (2) Point of return of water to stream.....
5. The water is to be diverted from its source at the following point: SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 14, T24N, R36E, MDB&M, or at a point from which the NW corner of section 5, T24N, R37E, MDB&M bears N38°23'00"E 20,003.9 feet.
Describe as being within a 40-acre subdivision of public survey, and by course and distance to a section corner. If on unsurveyed land, it should be stated.
6. Place of use..... Federal Geothermal Lease Nos. N 12861 and N 17282; all of Sections 11, 14, 15 and 23, T24N, R36E, MDB&M; and all of Sections 2, 3 & 13 and E $\frac{1}{2}$ Section 11, T24N, R37E, MDB&M.
Describe by legal subdivision, if on unsurveyed land it should be so stated.
7. Use will begin about..... January 1and end about..... December 31 of each year.
Day and Month Day and Month
8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Drill well to a depth of up to 9,000 feet, install casing and cement back to surface to protect fresh water zones. Hot water or steam will flow through pipeline to electric generating facility.
State manner in which water is to be diverted, whether by dam or other works, whether through pipes, ditches, flumes, or other conduits.

9. Estimated cost of works.....\$900,000.....
10. Estimated time required to construct works.....three years.....
11. Estimated time required to complete the application to beneficial use.....five years.....
12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

This application is for a geothermal well with a maximum production of about 5.0 million gallons per day. The maximum withdrawal will be about 5.615 acre feet per year; however, the high temperature water would be flashed with the net effect of 500,000 gallons per day being beneficially used and the remaining water returned to the reservoir so a maximum of only 562 feet per year is actually used. This application is submitted in conjunction with the other applications.

Applicant Republic Geothermal, Inc.....

By s/ Timothy M. Evans.....

Compared lp/bl.....

ja/sj.....

Timothy M. Evans, Vice President
11823 E. Slauson Ave., Suite One
Santa Fe Springs, California 90670

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of water herein granted is only a temporary allowance and that the final water right obtained under this permit will be dependent upon the amount of water actually placed to beneficial use. It is also understood that this right must allow for a reasonable lowering of the static water level. If the well is flowing, a valve must be installed and maintained to prevent waste. Accurate measurements must be kept of water placed to beneficial use. This source is located within an area designated by the State Engineer, pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

There are to be no perforations in the well for at least the first 5,000 feet. The well is to be cemented from at least the 5,000 foot level to the surface to protect fresh water zones.

This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially and fresh, cold water aquifers are not to be diverted.

This permit is further issued subject to the condition that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.

The total combined duty of water under this permit and Permits 37712, 37714, 37715, 37716 shall not exceed 5615.0 acre-feet annually.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed.....7.7.....cubic feet per second, but not to exceed a total of 5615.0 acre-feet annually from Permits 37712, 37713, 37714, 37715, and 37716 combined.

Actual construction work shall begin on or before.....September 19, 1980.....

Proof of commencement of work shall be filed before.....October 19, 1980.....

Work must be prosecuted with reasonable diligence and be completed on or before.....September 19, 1981.....

Proof of completion of work shall be filed before.....October 19, 1981.....

Application of water to beneficial use shall be made on or before.....September 19, 1986.....

Proof of the application of water to beneficial use shall be filed on or before.....October 19, 1986.....

Map in support of proof of beneficial use shall be filed on or before.....

Commencement of work filed.....
Completion of work filed.....
Proof of beneficial use filed.....
Cultural map filed.....
Certificate No.....Issued.....
Recorded.....Bk.....Page.....

IN TESTIMONY WHEREOF, I, WILLIAM J. NEWMAN
State Engineer of Nevada, have hereunto set my hand and the seal of
my office, this 19th day of MARCH

A.D. 19 80

William J. Newman
State Engineer